

Apr. 10.—Sky beautifully clear, and planet low; the images, however, were pretty steady and well defined. This was the first eclipse visible here of the new cycle. The observer's position was taken at the telescope about 16 min. before the time of the *Nautical Almanac*, and the satellite was first seen as a very small brownish speck.

Apr. 20.—Definition fairly good, but images slightly tremulous. Observation of first appearance possibly a second late.

Apr. 24.—Sky beautifully clear. On the whole the planet was pretty well defined, but the limb occasionally boiled.

Apr. 26.—Sky beautifully clear, but planet low and boiling.

May 12.—Sky beautifully clear, but twilight pretty strong; planet's limb occasionally boiled.

Note.—An occulting bar was not employed in the eclipse observations. The times given in the first and sixth columns are the Windsor mean times of observation diminished by $10^h 3^m 20^s.5$ and entered to the nearest second. The observations of full brightness in the eclipses are at the best only roughly approximate. In determining these times the increasing light of the satellite was repeatedly compared with the other visible satellites.

Private Observatory, Windsor, N.S. Wales:

1895 June 22.

Results of Micrometer Comparisons of Saturn and κ Virginis,
1895 May. By John Tebbutt.

During the close approach of *Saturn* to κ *Virginis* in May last I availed myself of the opportunity for securing a careful series of filar micrometer comparisons of the planet with the 8-inch equatorial. Comparisons were made on six nights under the most satisfactory conditions, the images being steady and well defined. A magnifying power of 74 diameters was employed throughout. On each of the first five evenings ten comparisons of the planets *preceding* and *north*, and the same number of the *following* and *south* limbs were made, in order to eliminate as much as possible any effect due to an error of the tabular semidiameter of the planet. On the last evening five comparisons only were obtained of each pair of corresponding limbs. The differential measures have been corrected for the tabular semidiameter, refraction, and a small inclination of the transit thread to the meridian when the distance threads were set parallel to the equator. The star's mean place for 1895.0 has been adopted as R.A. = $14^h 7^m 17^s.59$, N.P.D. = $99^\circ 47' 5''.8$ from the Greenwich Five-Year Catalogue of 258 Fundamental Stars for 1890. Considering the excellent conditions for observing, and the almost absolute accuracy of the place of the comparison star, I venture to think that the results as given in the accompanying table will prove as satisfactory as any derived from observations on the meridian. The last column of the table exhibits the resulting errors of the ephemeris on page 260 of the *Nautical Almanac*. The reductions plainly indicate that the semidiameter of the *Nautical Almanac* is somewhat too small. Measures of *Venus* and ϵ *Geminorum* were obtained on May 19 and 20, but the objects were so badly defined and tremulous that the results are scarcely worth publication.

Results of Micrometer Comparisons of Saturn and κ Virginis.

1895.	Windsor Mean Time.			Diff. R.A. Planet's Centre—Star.			Correction for Parallax.			Adopted Apparent R.A. of Star.			Geocentric Apparent R.A. of Planet's Centre from Observation.			Diff. N.A.—Obs.		
	h	m	s	m	s		s			h	m	s	h	m	s	s		
May 6	10	7	7	—	0	19	94	—	0	02	14	7	0	95	1	12	+0	17
7	8	45	49	—	0	34	9	—	0	03	14	7	0	01	45	25	+0	18
9	9	21	42	—	1	8	62	—	0	02	14	7	0	02	11	52	+0	14
13	8	26	38	—	2	13	09	—	0	03	14	7	0	04	7	13	+0	21
15	8	34	15	—	2	44	81	—	0	03	14	7	0	05	35	43	+0	22
16	8	50	56	—	3	0	40	—	0	02	14	7	0	05	19	72	+0	09
1895.	Windsor Mean Time.			Diff. N.P.D. Planet's Centre —Star.			Correction for Parallax.			Adopted Apparent N.P.D. of Star.			Geocentric Apparent N.P.D. of Planet's Centre from Observation.			Diff. N.A.—Obs.		
	h	m	s	'	"		"			°	'	"	°	'	"	"		
May 6	10	7	7	+ 11	19	8	+0	4	99	47	23	6	99	58	43	8	+1	0
7	8	45	49	+ 10	0	0	+0	4	99	47	23	6	99	57	24	0	+1	3
9	9	21	42	+ 7	11	7	+0	4	99	47	23	6	99	54	35	7	+1	6
13	8	26	38	+ 1	54	3	+0	4	99	47	23	6	99	49	18	3	+1	8
15	8	34	15	—	0	40	+0	4	99	47	23	6	99	46	44	0	+2	1
16	8	50	56	—	1	55	+0	4	99	47	23	6	99	45	28	2	+1	9

Private Observatory, Windsor, N. S. Wales:
1895 June 2.

*Errata in Mr. Tebbutt's Measures of Double Stars, MONTHLY NOTICES,
March 1895.*

Page 308, opposite to Ref. No. 11 and under "Eyes," for P read R.

Page 310, opposite to Ref. No. 60 and under "Distance," for .88 read 2.88.

Page 311, opposite to Ref. No. 64 and under "Hour Angles," for 3 7 W read 3 47 W.